

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Crop Watch

Extension

---

6-11-1999

## CropWatch No. 99-13, June 11, 1999

Lisa Brown Jasa

University of Nebraska-Lincoln, ljasa@unlnotes.unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/cropwatch>



Part of the [Agriculture Commons](#)

---

Brown Jasa, Lisa, "CropWatch No. 99-13, June 11, 1999" (1999). *Crop Watch*. 194.

<https://digitalcommons.unl.edu/cropwatch/194>

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Crop Watch by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



# CROP WATCH

University of Nebraska Cooperative Extension  
Institute of Agriculture and Natural Resources

No. 99-13  
June 11, 1999

## If drier weather continues, leaf rust damage to be moderate

Leaf rust, tan spot, powdery mildew, Septoria leaf blotch and barley yellow dwarf have been found in wheat plots in eastern Nebraska.

Leaf rust pustules were found on lower leaves but the flag leaves, so far, are free of rust and other leaf diseases. Leaf rust is severe in Texas and Oklahoma but has developed slowly in Kansas and Nebraska. This, combined with the wheat being ahead of schedule, should result in only moderate levels of leaf rust this year. However, leaf rust can develop rapidly during June especially with warm weather and frequent rain or heavy dew. Regardless of what happens, most of the state is past the fungicide treatment window for leaf rust and other leaf diseases.

Powdery mildew appears as white to light gray blotches on leaves. It is more evident this year because of the extensive cloudy and



### Septoria leaf blotch

wet weather during May. Like leaf rust it is confined to the lower leaves and will not have a major impact on yields.

Barley yellow dwarf is a virus disease that causes the flag leaves to turn a bright yellow toward the tip. It does not produce a striped mosaic pattern as is characteristic of wheat streak mosaic. In some plants the symptoms can show both the yellow tips and a mosaic pattern. These plants usually test positive for both virus diseases. Aphids vector the barley yellow dwarf virus. If infection occurs in the fall, yields can be affected; however, most infection occurs in spring and has less impact on yields.

Western Nebraska producers need to be alert to the presence of **wheat streak mosaic, tan spot and Cephalosporium stripe**. All three diseases were found in low levels in many wheat fields in an early May survey. Most growers are familiar

with the symptoms of wheat streak mosaic and tan spot but may not be familiar with the symptoms of Cephalosporium stripe. This disease produces yellow to tan stripes on leaves of infected plants. Infected plants are stunted and die prematurely without producing grain. The only control for this disease is to rotate out of wheat for at least two years.

John Watkins  
Extension Plant Pathologist

## Touchdown 5 okayed for RR soybean

Zeneca Ag Products received a label Tuesday (June 8) for the use of Touchdown 5 (sulfosate) post-emergence on Roundup Ready soybean from cracking through full flowering. Application rates for a single season range from a total of 1.2 to 3.2 pints per acre and should be selected based on weed species and growth stage.

Touchdown 5 will not provide residual control. To control later emerging weeds a repeat application may be required. Ammonium sulfate added to the spray mixture at 8.5 to 17 lbs per 100 gallons of water may improve weed control. Touchdown may be tank mixed with several herbicides to broaden the spectrum of control and to provide residual control.

Alex Martin  
Extension Weeds Specialist

### Inside

Field updates .....	106
Grasshoppers possible .....	117
Postemergence in soybeans .....	118
Controlling volunteer corn ....	119
Late planting .....	119
Effects of GMO trade .....	120
ARDC clinics .....	121
Weed tour June 21-24 .....	122



UNIVERSITY OF NEBRASKA-LINCOLN, COOPERATING WITH THE COUNTIES AND THE U.S. DEPARTMENT OF AGRICULTURE

University of Nebraska Cooperative Extension educational programs abide with the non-discrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.



## Field updates

**Terry Gompert, Extension educator in Knox and Boyd counties:** Regrowth of alfalfa after harvest is being slowed by alfalfa weevil. Damage is widespread in Knox, Cedar, Holt, and Boyd counties.

**Keith Jarvi, Extension Assistant for Integrate Pest Management:** Alfalfa weevil damage continues to be observed in parts of northeast Nebraska. Since the alfalfa was ready or nearly ready to cut, most growers opted to harvest the alfalfa rather than use an insecticide. Often harvesting the first cutting will kill many weevils and the problem will have been solved; however, with large populations in some fields, care should be taken to examine the alfalfa to determine if weevils are still present and holding back regrowth.

If larvae are still present, recent thresholds published by Colorado and Montana suggest that a population of more than eight larvae per square foot may require an insecticide treatment. If adults are present and the field hasn't greened up within three days, it is likely the weevils will need to be eliminated.

Commonly used insecticides that will control both larvae and adult weevils are: Baythroid, Ambush, Pounce, Furadan, Lorsban, PennCap®M, and Warrior. Use the middle range of rates listed on the label for most consistent control.

**Keith Glewen, Extension educator in Saunders County:** Many growers pushed the window of opportunity and got back into the fields too soon after the wet weather. As a result numerous growers are now cranking up the pivots in an effort to try and improve soybean emergence. We certainly don't have picture perfect crop at this time. There has been some substantial cutworm damage this spring in corn that warranted treatment. The last of the soybeans

are being planted this week, barring rain, here in the soybean capital of Nebraska.

**Roger Elmore, Extension Crops Specialist:** I had a few reports by Wednesday of corn plants in the V4 to V5 stage that are showing necrosis on leaf margins and some elongated irregular areas in the leaf. The first one of these looked like it could have been spray drift but nothing checked out. Then it became clear that the area affected was more widespread than what could be attributed to drift.

It looks like the strong winds during the predawn hours of June 5 may have caused this. Our average hourly wind speed was 30mph from 3 a.m. to 4 a.m. but wind gusts were

over 60 mph. It looks like all exposed leaves were influenced in certain parts of some fields. New leaves coming out show no damage and the leaves that were partially out show the part of the leaf that was exposed was damaged.

Confirmation from the Diagnostics Lab is necessary to confirm the cause. The good part of the story is that leaf damage before the seventh leaf stage is not expected to affect yield.

**Gary Zoubek, Extension educator in York County:** Producers are finishing planting those last soybeans and grain sorghum acres. They are also sidedressing and cultivating. Crops are beginning to

(Continued on page 119)



# CROP WATCH

In print or on the Web

1999 University of Nebraska

*Crop Watch* is published from March to November by the University of Nebraska Institute of Agriculture and Natural Resources Communications and Information Technology, PO Box 830918, 108 Agricultural Communications Bldg., UNL, Lincoln, NE 68583-0918. To order either a printed or electronic (web) subscription or to change your address, write to *Crop Watch* at the above address or call (402) 472-7981. A sample copy of the Web version is available free at <http://www.ianr.unl.edu/cropwatchnews>

Lisa Jasa, Editor

Email: [ljasa1@unl.edu](mailto:ljasa1@unl.edu)

For more information about a particular subject, write the authors at the addresses below:

UNL Department of Entomology  
202 Plant Industry Bldg.  
Lincoln, NE 68583-0816

UNL Department of Plant Pathology  
406 Plant Science Bldg.  
Lincoln, NE 68583-0722

UNL Department of Agronomy  
279 Plant Science Bldg.  
Lincoln, NE 68583-0918

UNL Department of Agricultural  
Meteorology  
236 L.W. Chase Hall  
Lincoln, NE 68583-0728



# Grasshopper problems predicted for western Nebraska and the Sandhills

A large area in east central Wyoming and extending into the Nebraska Panhandle and the West Central Sandhills has been identified for a potential outbreak of grasshoppers this year. While the potential impact will depend on the weather and other factors, growers are urged to be watchful for economic thresholds.

Each year the U.S. Department of Agriculture (USDA) Animal and Plant Protection Service (APHIS) prepares potential grasshopper outbreak maps for 11 western states. The outbreak areas are based on fall grasshopper surveys conducted the previous year.

The extent of potential problems this year will depend on climatic conditions at the time of hatch, range conditions during the growing season, and other factors. Cool wet weather at hatch or a freeze after hatch may greatly reduce grasshopper numbers. The disease predator and parasite impact on grasshoppers is greatest during cool, wet seasons. Grasshoppers are cold blooded and do not feed at temperatures below 45° F. During years with plenty of moisture, regrowth of range plants may offset grasshopper feeding damage.

Since the APHIS range grasshopper control program, which paid one-third of the cost of treating range grasshoppers, has ceased, it is generally not economical for ranchers to spray very much of their range. It may be economical, however, to treat the most valuable forage such as hay meadows and alfalfa.

Research conducted by the University of Wyoming and USDA-ARS scientists in cooperation with state departments of agriculture and weed and pest control districts has led to a new grasshopper manage-



Early predictions are for potential outbreaks of grasshoppers have been predicted for western Nebraska and the Sandhills.

ment strategy. This strategy has been termed "Reduced Agent and Area Treatments" (RAATS). The research was conducted on over hundred 40-acre plots and nine 640-acre operational trials. The research indicated that Sevin XLR (Carbaryl) applied at half the recommended treatment rate (8 oz vs. 16 oz per acre) on alternating treated and untreated 100-foot swaths optimized economic returns. Malathion (Fyfanon), also at half the recommended rate but alternating 100-foot treated swaths with 25-foot untreated swaths, was economically sound.

Research also was conducted with two newer products, Fipronil (Adonis) and Diflubenzuron (Dimilin), which are being reviewed by the Environmental Protection Agency (EPA) for registration. These two products are also effective at reduced rates and reduced treatment areas.

Most grasshoppers that feed on crops hatch in grassy areas next to fields. As long as the grass remains lush, they remain in the grassy areas, but if the vegetation dries or matures, the grasshoppers will move into crop areas. Barrier treatments in grass areas will prevent them from moving into crop areas. The exception is the migratory grasshopper which may

deposit eggs throughout the alfalfa field.

Grasshopper treatments should be implemented when the grasshoppers are in the early stages of development. As they get older and larger, they move from the hatching area, and when adult, can fly considerable distances. When this occurs, treatments have to be applied to much greater areas for satisfactory control.

Barrier treatments may have to be repeated since none of the recommended insecticides will provide control for more than two or three weeks. In the case of the migratory grasshopper in alfalfa, most of the alfalfa can be cut and treatment applied to the remaining strip because the grasshoppers move away from the cut alfalfa. In corn, grasshoppers generally will be concentrated at the outer edges of the field until late in the season so only the outer edges need to be treated.

**Jack Campbell**  
Extension Entomologist  
West Central REC  
**Gary Hein**  
Extension Entomologist  
Panhandle REC

## In soybeans

# Planning for postemergence weed control

By now, soybeans have been planted throughout much of the state and producers are gearing up for summer weed management. For some producers, the choice will be easy because they have planted herbicide resistant crops and will likely choose the corresponding herbicide. For others, the choice may not be as easy with the many products on the market controlling various weeds at different windows.

Many producers used a preemergence herbicide this year and may have much more flexibility in their postemergence weed management strategy. Producers

will generally be able to wait longer before applying postemergence herbicides or cultivating.

Several other strategies include the use of an early postemergence herbicide with residual such as a Roundup + Pursuit tank mix, a timely postemergence application followed by cultivation or two separate postemergence applications timed roughly 20-30 days apart, letting the weed growth stage dictate application timing.

Regardless of which strategy you use, timing of the weed removal is critical. Research has shown that soybeans should be free of weed

competition from the second trifoliolate to beginning bloom. The weed management method you choose should be flexible enough to kill the weeds during this critical time. Management strategies will largely be accepted based on the constraints of individual producers and busy schedules. Picking the strategy that best fits into your schedule will help you maintain optimum weed management this year.

**Jeff Rawlinson**  
Extension Weed Science  
**Alex Martin**  
Extension Weed Specialist

### Postemergence herbicides labeled for soybeans

Herbicide	Action	Rate per acre	Application timing	Additives
Assure II	Grass	7-8 oz	Grass 4 inches, shattercane and corn 12-18 inches	NIS 1 qt/100**
Basagran	Broadleaf	1-2 pt	Broadleaf less than 4 inches	COC 1 qt/A**
Blazer	Broadleaf	1-1.5 pt		NIS 1 qt/100**
Classic	Broadleaf	0.5-0.75 oz		NIS 1 qt/100**
Cobra	Broadleaf	10-12.5 oz	Broadleaf 2-4 inches	NIS 1 qt/100**
First Rate	Broadleaf	0.3 oz	Broadleaf less than 10 inches	NIS 1 pt/100**
Flexstar	Broadleaf	1 pt	Broadleaf less than 4 inches	NIS 1 qt/100**
Fusilade	Grass	6-12 oz	Grass 2-12 inches	NIS 1 qt/100**
Fusion	Grass	6 oz	Grass 4 inches, Shattercane and corn 12-18 inches	NIS 1 qt/100**
Pinnacle	Broadleaf	.25 oz	Broadleaf 2-8 inches	NIS 1 qt/100 + UAN 2-4 qt/A
Poast Plus	Grass	18-24 oz	Grass, 4 inches, shattercane and corn 12-18 inches	COC 1 qt/A**
Prestige	Grass	2 pt	Grass and broadleaf up to 3 inches, shattercane up to 6 inches	COC 1 qt/A**
Pursuit	Broadleaf			
	+ Grass	1.44 oz	Weeds 2-4 inches	NIS 1 qt/100 + UAN 1-2 qt/A**
Raptor	Broadleaf			
	+ Grass	5 oz	Weeds 2- 4 inches	NIS 1 qt/100 + UAN 2-4qt/A**
Reflex	Broadleaf	1 pt		NIS 1 qt/A**
Reliance STS* <sup>a</sup>	Broadleaf	0.5 oz	Broadleaf less than 6 inches	COC 1 qt/A**
Resource	Broadleaf	4-8 oz	Broadleaf less than 4 inches	COC 1 qt /A**
Roundup Ultra*	Broadleaf			
	+ Grass	1 qt	Grass and broadleaf less than 12 inches	
Select	Grass	6 oz	Grass 4 inches, shattercane 6-18 inches, corn 12-24 inches	COC 1 qt /A**
Stellar	Broadleaf	5 oz	Broadleaf 2-6 inches	NIS 1 qt/100**
Synchrony STS*	Broadleaf	0.5 oz	Broadleaf less than 6 inches	COC 1 qt/A**

\*May use non-STs when mixed with NIS + ammonium fertilizer instead of COC

\*Requires herbicide resistant soybeans

\*\*More than one additive is labeled

## Controlling volunteer corn in soybeans

It's not surprising to see volunteer corn in soybean since the two crops are used in rotation; however, volunteer corn is a weed and should be treated accordingly. It reduces available light for soybean, interferes with harvesting and makes the field look 'messy'. Generally corn grows faster than soybeans and, if left uncontrolled, will overtop the soybean canopy. Control can be achieved by mechanical means (eg. inter-row cultivation) or herbicides.

Timing of inter-row cultivation should depend on the weed pressure. The growing point is below ground until the sixth leaf. Run the cultivator shovels under the grow-

ing point so the corn won't regrow.

Herbicides also can be used to control volunteer corn. If you have Roundup-Ready soybean, Roundup will control volunteer corn, unless it's Roundup Ready corn from last year. Several grass herbicides (graminicides) can be used postemergence in both conventional and Roundup Ready soybean. These include: Assure, Fusilade, Fusion, Poast, Poast-Plus, and Select. Best control is achieved when herbicides are applied by the three- to four-leaf stage of corn. These herbicides will also control many grassy species, including barnyardgrass, green and yellow foxtail, fall panicum and sandbur.

Generally, timing of postemergence weed control in soybean should depend on the weed pressure. In relatively 'weedy' fields, control should be implemented by the second trifoliate stage of soybean. Remember, the critical period for weed control in soybean is from the second trifoliate to beginning pod. In general, that is from the tenth to the fortieth day after soybean emergence.

**Stevan Knezevic**

**Extension Weed Specialist  
Northeast REC**

**Jeff Rawlinson, Extension  
Technologist, Weed Science**

**Alex Martin  
Extension Weed Specialist**

## Field updates

*(Continued from page 116)*

take off and the next worry will be getting them cultivated before they get too large.

**Ralph Anderson, Extension educator in Buffalo County:** The rains held off and the sun is out. Corn is responding accordingly and is really growing fast. This has enabled it to outgrow some of the earlier symptoms of herbicide damage. Although there has been some Balance symptoms in a lot of corn fields, they do not appear to be very yield limiting. Cultivators are out and many corn fields are really looking good.

**Ray Weed, Extension educator in Kimball County:** Winter wheat producers continue to rope-wick volunteer rye in winter wheat this week to get selective control due to height differences. In many wheat varieties, volunteer rye tends to be about 4 inches taller than wheat when both are fully grown. Volunteer rye, downy brome, and various species of mustards are significant problem weeds in winter wheat due

## Planting soybeans late or replanting?

**Q:** *Should we switch to earlier maturing soybean varieties when planting late?*

**A:** *The answer is no (with a condition).*

Early to mid-season adapted varieties should be used. I would not grow the longest season varieties adapted to an area. On the other end, I would not grow varieties that are earlier than the earliest varieties that are normally grown. For example, if varieties typically grown in an area are Maturity 2 to 3.5, I would recommend that farmers plant M.G. 2-3 or so. Planting earlier maturing



varieties than those normally grown will reduce yield potential. Full season adapted varieties will face a risk of frost in the fall. All varieties planted late will be shorter than normal and crop canopies may not close as fast or at all. Thus, weed management may be a bigger concern than when soybean are planted more timely.

**Roger Elmore  
Extension Crops Specialist  
South Central REC**

*(Continued on page 122)*



# How will GMO restrictions affect corn and soybean exports?

The issue of import restrictions on U.S. genetically modified organisms (GMOs), namely corn and soybeans, by foreign importers raises interesting questions. Is this economics or international politics, and what are the implications for U.S. producers? The answer is: it depends. It depends upon which importing nations are threatening restrictions and which grain (corn or soybeans) the restrictions apply to.

Let's consider the facts, beginning with corn. In recent years U.S. corn exports have ranged from 45.3 to 51.5 million metric tons while total U.S. supply was at 282.7 million metric tons in 1996 and is projected at 312.1 for 1998.

**Fact #1** — Total corn exports are an important market for U.S. corn producers, but the export market is secondary to domestic use. Exports are accounting for roughly 17% to 20% of total corn use.

**Fact #2** — It depends on which importing nations are threatening restrictions. The European Union (E.U.) is threatening restrictions on U.S. GMO corn; however, the E.U. is a rather insignificant importer of U.S. corn. In 1995, the E.U. bought 6.0% of U.S. corn exports or 1.8% of total U.S. supply. In 1996 respective numbers were 3.5% (of U.S. corn exports) and 0.8% (of U.S. corn use). If GMO corn represented one-half of U.S. corn exports to the E.U., the fraction that would represent of the total U.S. market for corn would have been 0.9% in 1994 and 0.4% in 1996. The price impact on U.S. producers would have been insignificant.

If, on the other hand, Japan were to restrict U.S. imports of GMO corn, the result would be significant. Japan imported 26% to 28% of U.S. corn exports in the mid 1990s.

The picture changes for soybeans. The E.U. is the major export

market for U.S. soybeans. In the mid-1990s the E.U. purchased roughly 40% of U.S. soybean exports. This amounted to approximately 13% of total U.S. use. Japan, on the other hand, was a less important export market for U.S. soybeans, accounting for 16%-17% of soybean exports and 5% to 6% of the total U.S. market for soybeans in the mid 1990s.

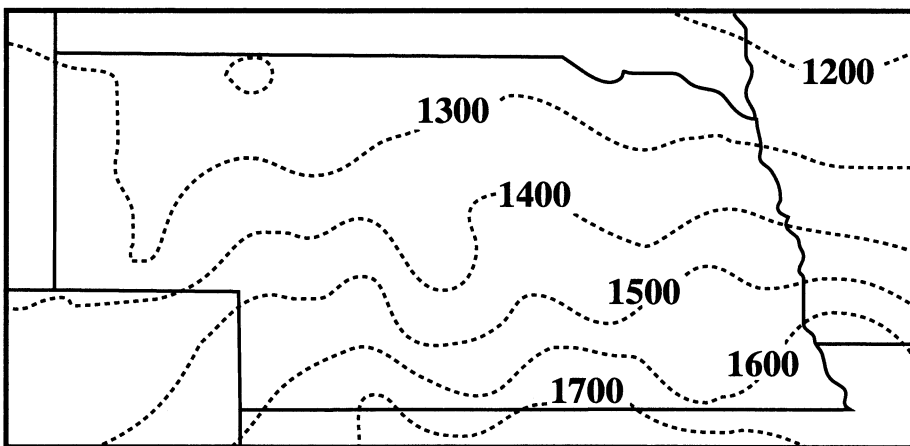
As one might imagine, estimating price impacts from export restrictions is a challenging task. To do an adequate job, crop substitutions and production responses must be considered as a part of the price adjustment process, something not covered in this article. However, it is understood that a different response is expected to a reduction in export demand. The loss of a U.S. export market simply means foreign buyers realign with the remaining world exporting nations. In addition, there is a larger number of substitute products available in world markets. This means buyers in international commodity markets are aggressive shoppers and the

quantities they buy from individual exporting nations are significantly influenced by prices. In contrast, domestic markets operate exactly the opposite. With domestic markets quantities purchased remain fairly constant despite dramatic price swings because there are fewer substitute products. When products can't be sold through export markets, those supplies remain for domestic markets where prices are highly sensitive.

In conclusion, E.U. restrictions on U.S. GMO corn are not a big deal when it comes to U.S. corn prices. But neither are bananas even though U.S. trade representatives have made them a major issue. Japanese restrictions on either GMO corn or soybeans would be a real concern to U.S. producers.

Sometimes it is helpful to understand the **choice** of battles to be fought. The E.U. battle over GMO corn restrictions may be a safe choice which will not pose a big threat to U.S. producers.

**Mike Turner**  
Extension Marketing Specialist



## Common stalk borer

Growing degree day (GDD) accumulations since Jan. 1 on a 41°F base for the common stalk borer. Begin scouting at 1,300-1,400 accumulated GDDs.

# *ARDC clinics offer the latest information and interaction with presenters and professionals*

Change is constant in agriculture. Keeping up with the latest technology and changes in crop production in a timely manner is a continuing challenge.

Genetic modifications, diverse cultural practices, and environmental regulations are some of the subject matter that have gained widespread attention in recent years. When coupled with the necessity of efficient, economical practices, these changes often mandate an expanded, broad knowledge base.

The University of Nebraska Crop Management and Diagnostic Clinics are providing these educational opportunities to agribusinesses and producers through small group, indepth training sessions. The clinics, sponsored by the University of Nebraska Cooperative Extension, are held at the NU Agricultural Research and Development Center (ARDC) near Mead.

A 14-acre site has been specially developed to provide a hands-on demonstration and learning environment where University and industry agricultural specialists and professionals can provide indepth, up-to-date information. Interaction between presenter and participant is encouraged.

Following is a list of some of the clinics available this summer. For more information contact the ARDC at (402) 624-8030, fax (402) 624-8010 or register on the web at <http://ianrwww.unl.edu/ianr/saunders/online.htm>

## **Early Season Diagnostic Clinic, June 22**

Identification and management of seedling diseases, alfalfa and wheatleaf diseases. Best strategies when using post-emergent herbicides, including Round-Up, for

weed control. The effect of acidic and alkaline soils on crop plants in Nebraska. Growth response of corn to organic and inorganic forms of nitrogen. Response of soybeans to starter fertilizer. Effect of fertility on alfalfa nodulation.

Irrigation management strategies. Understanding soil surveys and their potential applications. Hands-on soils identification and mapping.

Six CCA-CEU credits (2.5 pest management; 1 soil fertility; 2.5 soil and water management).

## **Mid-Summer Diagnostic Clinic, July 13, 20**

Soil fertility demonstrations, including deficiency symptoms, low pH and high pH. Growth response of corn to organic & inorganic sources of nitrogen. Response of soybeans to starter fertilizers. Identification and prevention of compaction problems. Field corn diagnostics, including disease, insect, herbicide injury and planter problems. Different scenarios of weed control using post-emergent, including Round-up and Liberty herbicides.

Insect resistant corn hybrids: resistance to European Corn Borer and corn rootworm.

Managing alfalfa to produce a high quality forage (July 13 only). Using sprinkler packages in an irrigation system, crop water needs. Understanding soil surveys and maps and their potential applications. Hands-on soil identification and mapping. Best management practices to optimize effects of herbicide application on quality of surface and ground water.

Diagnosing drift injury and troubleshooting drift problems.

(Total of six CCA-CEU's, individual categories depend on choice of participant.)

## **Late Summer Diagnostic Clinic, August 24**

Intensive crop disease diagnostics in corn: gray leaf spot, anthracnose, smut, Goss's wilt and management using fungicides (Tilt, Quadris). Also, soybean diseases and sclerotinia stem rot. Diseases of dry edible beans, white mold, rust and common blight. Using a digital camera as a quick diagnostic tool. Impact of fall tillage on soil moisture, erosion potential and other soil parameters. Compaction identification and remediation. Fall fertilization, how to use a stalk nitrate test. Fertilizing wheat after soybeans. Getting the most information out of your soil test. Soil sampling techniques: grid vs. smart sampling.

(Total of six CCA-CEU credits; 2.5 in pest management, 2.5 in soil fertility, 1 in soil and water management)

## **Precision Farming Field Clinic, September 8**

Hands-on field calibration of a yield monitor (growing season permitting). Computer systems needed to support GPS/GIS software. Understanding and using digital soil surveys as part of site specific management system. How to transform data from a yield monitor into a map. Interpreting a yield map: getting as much from a yield map as possible.

Generating profitability maps. Using remote sensing to identify agronomic problems in the field. (Total of six CCA-CEU credits; categories not yet determined.)

Costs vary with the clinic and whether a notebook is included.

**Barbara Ogg, Extension Educator,  
Lancaster County  
Deloris Harder, ARDC Educational  
Programming Assistant  
Keith Glewen, Extension Educator,  
Saunders County**



## Nebraska Weed Tour June 21-24

This year's Nebraska Weed Tour will begin in Concord June 21. The tour, conducted by the University of Nebraska Cooperative Extension and Department of Agronomy, provides a first-hand look at University research herbicide trials. While most participants are from the agricultural chemical industry, the tour is open to the public. Individuals may attend all or any part of it.

**Monday** — June 21, 1 p.m., Haskell Ag Lab, Concord

**Tuesday** — June 22, 9 a.m., NU Havelock Research Farm, Lincoln.

3 p.m., South Central Research and Extension Center, Clay Center

**Wednesday** — June 23, 9 a.m., West Central Research and Extension Center, North Platte

3 p.m. (MDT) High Plains Agricultural Laboratory, Sidney

**Thursday** — June 24, 8:30 a.m. (MDT), Panhandle Research and Extension Center, Scottsbluff

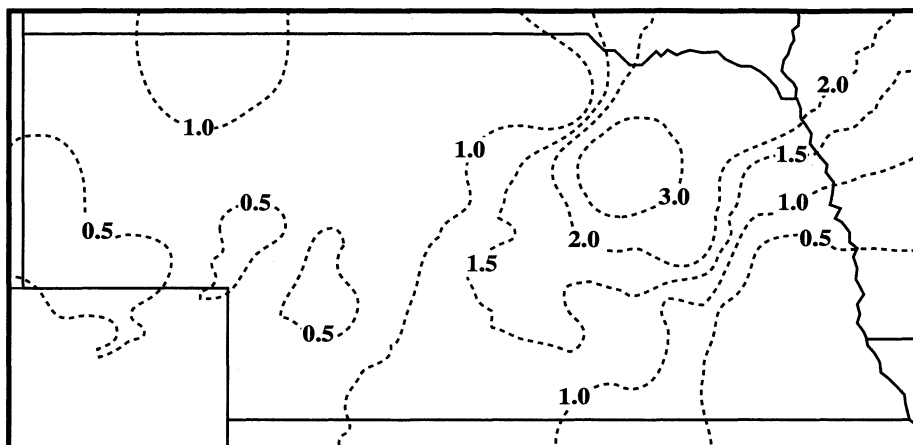
## Field updates

(Continued from page 119)

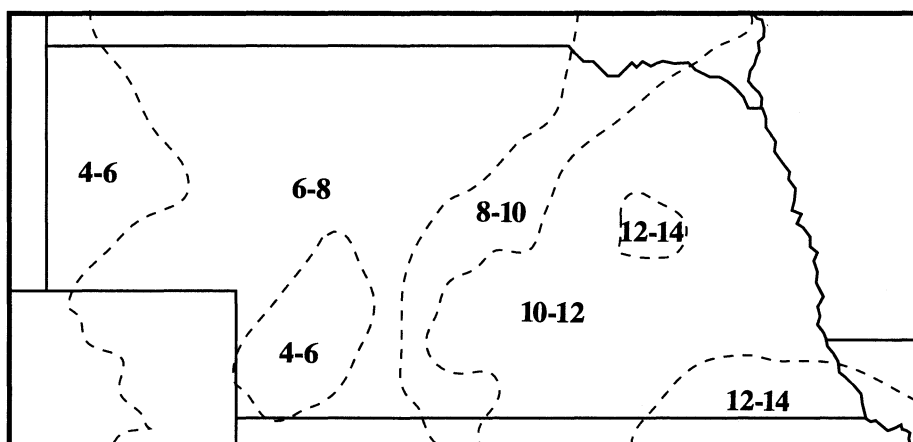
to a mild winter and abundant spring moisture. Eighty-five percent or more of the wheat in Kimball-Banner Counties is headed out now. Corn is finally growing well with warmer soil temperatures and growers are treating for broadleaf and grassy weeds.

**Paul C Hay, Extension educator in Gage County:** We are finally nearing the end of planting season and will be finished by the week's end if it doesn't rain. Considerable acres of soybeans had to be replanted due to washing and crusting. We're seeing minor problems with soybean seedling diseases, wireworm, chinch bugs in volunteer wheat residue, and bean leaf beetle. Don't forget about last year's crop still in storage. Hot buggy grain is just a couple weeks of neglect away.

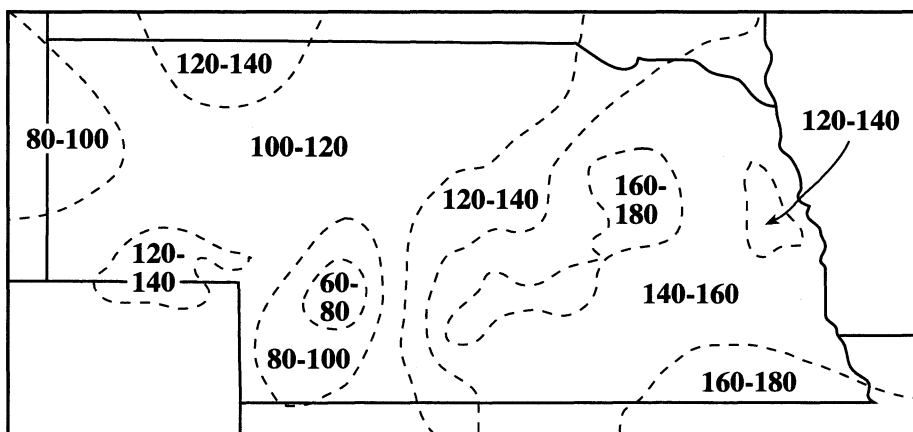
## Precipitation



From May 31 to June 6, in inches



From April 1 to June 6, in inches



From April 1 to June 6, percent of normal